



March 27, 2008 HAN: UPDATE: Measles outbreak in Pima County

The Pima County Health Department and Arizona Department of Health Services would like to remind all healthcare providers that there is an ongoing outbreak of measles in Pima County. Currently, there are 9 confirmed cases, 3 epi-linked and 6 laboratory-confirmed cases (age range 10 months to 50 years). All cases were unvaccinated at the time of exposure.

The typical presentation of measles is fever with cough, coryza, conjunctivitis and malaise for 2-4 days. Then a maculopapular rash starts on the face and upper body, spreading down over the entire body over the following 3-4 days. Immunocompromised patients may not exhibit rash. Some of our measles cases had atypical presentations and delayed diagnoses, leading to the exposure of multiple hospitalized patients because they were not placed in airborne isolation immediately after hospital admission.

Please consider measles in the differential diagnosis of ANY patient with a fever and rash in Pima County or with exposure to someone from Pima County. The following are in the differential diagnosis for measles and should trigger consideration of immediate measles testing:

- Drug rashes, including Stevens-Johnson syndrome
- Varicella
- Rubella
- Scarlet fever
- Infectious mononucleosis
- Toxic shock syndrome
- Rocky Mountain spotted fever
- Henoch-Schönlein purpura
- Serum sickness
- Roseola infantum
- Erythema infectiosum
- Echovirus
- Coxsackievirus

The Arizona Department of Health Services recommends that all health care providers in Pima County have documented evidence of immunity to measles as recommended in the 1998 ACIP recommendations for measles with one of the following*:

- 2 doses of MMR
- Serologic evidence of immunity to measles
- For individuals born before 1957, at least one dose of measles containing vaccine
- Documentation of physician diagnosed measles

A health care worker is defined as any person (i.e., medical or non-medical, paid or volunteer, full- or part-time, student or nonstudent, with or without patient-care responsibilities) who works at a facility that provides health care to patients (i.e., inpatient and outpatient, private and public). Facilities that provide care exclusively for elderly patients who are at minimal risk for

measles and rubella and complications of these diseases are a possible exception. This outbreak highlights the risk of measles importation into any community and the burden of measles cases on health care facilities. We would encourage all health care facilities statewide to evaluate the immune status of workers and suggest that susceptible individuals be vaccinated.

Additionally, it is recommended that healthcare providers in Pima County use an accelerated measles vaccination schedule in children. Children ages 6 months to 12 months of age should receive a single dose of measles-mumps-rubella (MMR) vaccine. Children \geq 12 months of age should receive their first dose of MMR as soon after their first birthday as possible. Instead of waiting for school entry to receive their second dose, children should receive their second dose of MMR as soon as possible while making sure that at least 4 weeks have passed between the first and second dose.

Please be aware that measles cases might be seen in other counties in Arizona.

Again, measles should be considered in any patient with fever and rash, especially if conjunctivitis, cough, coryza, or malaise are present. Measles should also be suspected in people born before 1957 who have compatible clinical symptoms, since a small percentage are susceptible.

If you suspect that a patient may have measles, please contact your local health department immediately. Measles testing with serology or viral culture (requires serum, urine and nasopharyngeal specimens) can be facilitated by your local health department. Unimmunized contacts of measles cases can be vaccinated within 3 days of exposure, or given gamma globulin within 6 days of exposure to prevent or ameliorate the illness.

Measles is an extremely contagious viral disease and is spread through the airborne route. The following are infection control measures to limit institutional spread of measles. In a hospital setting, a patient with suspected measles should be placed immediately in a negative pressure room. In a clinic setting, a patient with suspected measles should be quickly placed in a private room with the door closed, and offered a surgical mask. Avoid using the involved examination room for at least 2 hours after the patient leaves. Move suspected measles patients out of waiting rooms as soon as possible.

Please see the ADHS measles website for measles information for clinicians and families (http://www.azdhs.gov/phs/oids/epi/disease/measles/measles_q.htm). The Centers for Disease Control and Prevention measles website can be found at <http://www.cdc.gov/vaccines/vpd-vac/measles/default.htm>. For further questions, please contact your local health department or the Office of Infectious Disease Services at (602) 364-4562.

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*Centers for Disease Control and Prevention. Measles, Mumps, and Rubella — Vaccine Use and Strategies for Elimination of Measles, Rubella, and Congenital Rubella Syndrome and Control of Mumps: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1998;47(No. RR-8): 1 -58.

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